

1. Introduction

Water utilities in developing countries (particularly in Africa) face enormous challenges in meeting the water needs of the growing urban population. Many of these challenges are as a result of inappropriate utility management practices, including the lack of a commercial-oriented culture to drive performance improvements. A number of options have been tried in an attempt to address this problem. The most notable one is private sector participation, which has included contracting multinational water companies to run water utilities. However, there is growing scepticism among policy makers and water sector professionals on how extensively the private sector can be called upon to improve the performance of public utilities. On the other hand, there is growing optimism that public water utilities can improve their own performance by applying commercial management principles. Major players in the water sector are therefore implementing reforms and alternative approaches to improving utility management and performance.

The Water Utility Partnership for capacity in Africa (WUP) was established to help water utilities improve their performance and achieve economic and environmentally sustainable service delivery. WUP works by building partnerships among African water supply and sanitation utilities and other key sector institutions, to share experiences and capacity building. Supported by the Swedish International Development Agency (SIDA), WUP initiated a project in 2001 aimed at improving utility management and reducing unaccounted for water (UfW). The project was based on a novel partnership of international expertise and participating utilities, delivering capacity building using participatory approaches. Severn Trent Water International (STWI) (UK) in association with the Water Engineering and Development Centre (WEDC), Loughborough University (UK) constituted the consultancy and backstopping team. The six participating water utilities included: Entebbe (Uganda), Kisumu (Kenya), Mwanza (Tanzania), Maseru (Lesotho), Cotonou (Benin) and Brazzaville (Congo).

This policy brief discusses the participatory framework used to develop five year solution-oriented performance improvement plans (PIP), and to equip utility staff with the necessary knowledge and skills to prepare and execute the plans. Key outcomes of the project are discussed and conclusions are drawn on how this approach can be adopted by other utilities in low-income countries to improve management performance.

2. Background and objectives

This project formed part of WUP's Action Programme, designed to meet its objectives of improving utility performance, improving services to the urban poor and creating a framework for collaboration among water utilities and various training and research organisations. The project was undertaken in two phases. Phase 1 (2001) involved a selection and performance audit of representative African utilities. This included development of audit methodology, training, performance audits and evaluation. Phase 2 (from July 2003) involved preparation of Performance Improvement Plans and Action Plans for the Reduction of UfW. This brief is concerned with the activities and results of phase 2.

The purpose of phase 2 was to:

- improve management skills through seminars and workshops;
- prepare Performance Improvement Plans (PIPs) with each utility and provide support;
- train participants and demonstrate the importance of reducing UfW;
- prepare and develop pilot zones for UfW reduction;
- allow for an expansion of services to peri-urban areas;
- monitor progress and report regularly;
- raise operational and management standards for participants to operate with financial autonomy; and
- provide material, training and expertise to enable the participants to help other utilities.

The scope of the work to meet these objectives was made up of the following key tasks:

1. Preparation of a training course on best practice in commercial and customer-oriented water utility management
2. Development of a general PIP and UfW reduction plan
3. Implementation of training
4. Assistance during PIP preparation
5. Dissemination seminar on draft PIP plans
6. Backstopping support during final plan preparations
7. Dissemination to other African utilities.

3. Project methodology

The participatory approach maximised ownership of project objectives by staff of the participating utilities. A key aspect of the methodology was that the project team (STWI and WEDC) acted as facilitators, while the participating utilities planned and produced the outputs. Local staff had knowledge of the prevailing situation and problems in their organisations, while external experts have knowledge of best practice from around the world.

3.1 Performance Improvement Plans

A key component of the project was the concept of the PIP, which is a comprehensive work plan developed to address a variety of management issues, to enable the utility to achieve its objectives. The PIP was based on the following strategic questions:

- Where is the utility now?
- Where does the utility want to be?
- How might the utility get there?
- How does it ensure success?

The PIP framework also incorporated an action plan for reduction of UfW involving: (1) measurement of flows (supply and demand); (2) validation of readings; (3) identification of the problem (leaks and commercial losses); and (4) rectification (repair of leaks and correcting billing databases). In order to manage UfW, the project recommended the establishment of District Meter Areas (DMAs) as the most effective way to measure, validate, identify and rectify both technical and commercial losses.

3.2 How PIPs were developed

Using a participatory approach, the process involved the following stages:

1. A comprehensive institutional analysis and performance audit
2. Training workshop on utility management and development of PIPs
3. Preparation of draft PIPs
4. Internal and external reviews of draft PIPs
5. Completion of PIPs
6. Dissemination to internal stakeholders.

3.2.1 Institutional analysis

Top and middle utility managers undertook a comprehensive analysis of strengths, weakness, opportunities and threats (SWOT) and a political, environmental, social and technical (PEST) analysis. A preliminary analysis and formulation of organisational objectives and preliminary plans and strategies for improvement were also carried out, with in-house consensus solicited on the issues.

3.2.2 Training for capacity building

Two-week training courses were facilitated by the project team in Durban, South Africa and Dakar, Senegal. These were to provide knowledge and skills to enable the development and implementation of effective PIPs, by familiarising participants with the principles of technical, commercial and financial operations used in modern utilities. The training was participatory, based on shared learning and experiences using lectures, case study presentations, field visits and discussions in cross-utility and utility working groups. The key output was an outline framework for PIPs and an action plan for UfW for each utility. This learning was followed up during subsequent team visits to the utilities to ensure it was applied in preparing the PIPs.

3.2.3 Preparation of draft PIPs

Through the institutional analysis, each utility agreed on a vision and mission derived from the organisation's mandate, objectives, performance standards and targets. The general outline of the PIP was therefore:

- background information;
- analysis of the present status of the utility using PEST and SWOT tools and key performance indicators (i.e. where the utility is now);
- vision and mission statements, goals and objectives (i.e. where the utility wants to be);
- strategies to be employed (i.e. how the utility wants to get there). Common strategies included: new commercially oriented management structures; management of UfW using pilot DMAs; customer relations management; human resources; management information systems (MIS), preventative and planned maintenance and financial management;
- resource requirements (financial and non-financial);
- monitoring and evaluation mechanism; and
- financial plan with cash flow derived from the PIPs and the financial model.

3.2.4 PIP review and finalisation

The draft PIPs for each utility were subject to a participatory review by the project team and other utility managers. First, a joint review was undertaken with each utility management team and the project team. Secondly, each organisation presented their draft PIPs at a seminar for peer review. The finalised PIPs took account of this feedback and were accepted by key stakeholders and authorised by relevant bodies before formal implementation.

4. Project outputs, challenges and lessons learnt

The project achieved the following outputs, in line with the initial objectives:

- Performance Audit Manual;
- exposing senior and middle managers to modern utility management;
- a comprehensive training program;
- training documentation;
- draft PIPs and UfW action plans, and final plans at the conclusion of the project;
- training of at least three managers from each utility in modern management and preparation of PIPs and UfW pilot area planning; and
- increased awareness of the project among water utilities in Africa.

4.1 Implementation of PIPs

Technically, the plans produced by each utility are robust and follow best international practice, indicating successful knowledge transfer of the issues. Progress on implementation has varied, but most have undertaken:

- Organisational restructuring to more commercially oriented structures
- Review of Management Information Systems
- Establishment of one or more pilot zones for UfW monitoring and reduction (DMAs). It is too early to quantify the effectiveness of these in reducing UfW, as many of the utilities are undergoing change which can detract from other priorities. The funding, procurement and installation of DMAs has also contributed to delays.

4.2 Results of the project so far

All participating utilities have produced PIPs. Although implementation is dependent upon adequate financial resources (from within the utility or externally sourced), the utilities have registered some achievements as a result of the project. They now have a clearer vision of what is required to improve overall financial performance and customer service. Other achievements include:

- reviewing and improving billing efficiency;
- reviewing connection policy / illegal connections;
- new UfW/revenue sensitive management structures;
- enhanced understanding of the importance of UfW reduction;
- better planning enhanced by financial modelling;
- benchmarking and a spirit of competition among utilities;
- implementation of DMAs and achievement of significant UfW reductions; and
- increased capacity of senior and middle management staff to undertake strategic planning.

4.3 Challenges and lessons learnt

The main challenges and problems encountered during implementation of the project were:

- changes in top management in some utilities (e.g. Kisumu and Maseru);
- institutional changes (e.g. Cotonou, Benin);
- financial constraints (e.g. Cotonou, Benin); and